

is almost certain, however, that true *arenacea* does not breed in Texas, and the eggs mentioned by Mr. Norris were doubtless those of the common Field Sparrow or of the slightly paler but equally small bird resident in some portions of that State. The eggs of true *arenacea* will probably be found to average somewhat larger than those of the eastern bird.

NOTES ON THE BIRDS OF FORT SHERMAN, IDAHO.

BY J. C. MERRILL,

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FORT SHERMAN is situated in the northern part of the State of Idaho in latitude $47^{\circ} 40'$, longitude $116^{\circ} 30'$, and at an elevation of a little less than two thousand feet. The Idaho-Montana boundary line, formed here by the divide of the Bitterroot Mountains, is about seventy miles distant due east; that of Idaho-Washington is about eleven miles west, and that of British Columbia about ninety-five miles north.

The fort is on the northern shore of the northwestern arm of Lake Coeur d'Alêne, in the angle between the lake shore and the head of Spokane River, which is the outlet of the lake and empties into the Columbia about seventy-five miles north of west from the lake. The latter is nearly twenty-four miles in length, comparatively narrow in most parts, and its general trend is north and south. The Coeur d'Alêne Mountains, north and east of the lake, are a continuation of the Bitterroot range; in them arises the Coeur d'Alêne River, flowing into the southern end of the lake, and, still further south, the St. Joseph River forms the other principal tributary. The hills—they can hardly be called mountains—that encircle the lake are covered to the shores with a thick growth of pines and firs of two or three species, with tamaracks scattered throughout. Where streams flow into the lake there are often flats of a few acres in extent, subject to overflow in the

spring; here a growth of tules, water grasses, and willows, with a limited number of cottonwoods on the edges, form the only inviting spots for a considerable number of land birds that never from choice enter the surrounding pine forests, and a few marsh birds and Ducks also frequent them. A belt of cottonwoods extends along the Spokane River for some miles and affords a convenient route for many migrants. Except close along shore the northern part of the lake is very deep, and in the autumn most water birds soon find their way to the southern end where the marshy valley of the St. Joseph River offers congenial feeding and resting places. About every third winter the surface of the lake is frozen; as long as it is open a few Grebes, Gulls and Ducks remain, going to the always open Spokane River when forced to by the ice. A marsh of the character described is about a mile southwest of the fort and is sometimes referred to in this paper. About six miles to the north, a pine forest intervening, is the eastern end of the great Spokane prairie. Mica Peak, locally so-called, one of the highest mountains in the vicinity, is about eleven miles to the southwest, gradually rising from near the lake shore to a height of about three thousand feet above it; the summit is about a mile east of the Washington State line. Another and the true Mica Peak is about three miles further southwest; it is in Washington, and is a little higher than the Idaho peak of the same name.

In some respects the local climatic conditions resemble those of the Northern Cascade Range more nearly than those of any other part of the Rocky Mountains or its neighboring ranges in the United States. The winters usually are not severe and Chinook winds are frequent. The rainfall, including its equivalent in the heavy winter snowfall, is considerable and the large number of cloudy days adds to the faunal effect of the actual rain and snow. The avifauna is, as would be expected, essentially that of the Northern Rocky Mountains, but there is an element of Cascade Mountain forms, as shown by the presence of such species as *Xenopicus*, *Troglodytes hiemalis pacificus*, *Parus rufescens*, *Hesperocichla*, and others.

The little collecting that has been done in Idaho was chiefly in the southern and central parts of the State and has been well

brought together by Dr. C. Hart Merriam in Number 5 of the 'North American Fauna' series of the Department of Agriculture.¹ This report enumerates 156 species and throws much light on the summer fauna of Southern and Central Idaho. The present paper may be considered as supplementing it as to the winter avifauna and that of the northern part of the State. Since the publication of Dr. Merriam's paper Prof. B. W. Evermann made a small collection in the Sawtooth range district in September, 1894, and has kindly allowed me to look over his MS. notes. Two male Pipilos, identified as probably *megalonyx*, is the first record of this species in Idaho.

The following observations were made from November, 1894, until December, 1896. One hundred and sixty-seven species are enumerated, of which fifty, to each of which an asterisk is prefixed, have not, so far as I am aware, been previously taken in Idaho. I desire to express my obligations to Mr. William Brewster for kindly identifying some of the species; his opinions are incorporated in the text.

* *Æchmophorus occidentalis*.— A single specimen taken.

* *Colymbus holbœlii*.— Resident but most common during migrations. A nearly completed nest was found in the marsh on May 18; when again visited on June 3 it contained four eggs, but was deserted, owing probably to the rapid fall of the lake level leaving it high and dry. The parents continued in the vicinity throughout the summer and probably bred again.

¹ One paper has been overlooked by Dr. Merriam in the preparation of his list. It has the somewhat misleading title of 'The Fauna of Montana Territory,' by J. G. Cooper, and may be found in the 'American Naturalist,' II, pp. 596-600; III, pp. 31-35; 73-84; also p. 224. The context shows that certain species were taken or observed in what is now the State of Idaho. Of such not included in the Merriam list are, to quote the names as given, *Falco columbarius*, *Turdus nevius*, *Sialia mexicana*, *Seiurus noveboracensis*, *Setophaga ruticilla*, *Sitta pygmaea*, *Parus rufescens*, *Curvirostra americana* var. *mexicana*, *Curvirostra leucoptera*, *Corvus caurinus*, *Columba fasciata*, *Ectopistes migratorius*. It may be remarked in regard to these species that the Water Thrush was undoubtedly the *notabilis* form; the Crossbill *L. curvirostra minor*, and the Crow *C. americanus*, and not what is now understood as *caurinus*. *Columba fasciata* was not satisfactorily identified.

Seiurus aurocapillus should also be added to the avifauna of Idaho, as Dr. Cooper states (Bull. N. O. C., II, 1877, p. 91) that it has been "recently recorded from Idaho." I do not know where this record is to be found.

- * *Podilymbus podiceps*.— Common on the lake in spring and autumn.
- Urinator imber*.— Resident and quite common except in winter.
- * *Larus argentatus smithsonianus*.— Several taken on the lake during fall and winter.
- * *Larus delawarensis*.— An adult taken January 6, and several young in September; not rare during winter. I saw no Gulls on the lake during summer.
- * *Larus philadelphia*.— One taken and several seen in November.
- A small white Tern breeds about the lake, but I did not succeed in procuring any specimens for positive identification.
- Phalacrocorax dilophus cincinnatus*.— Several Cormorants, probably of this form, were seen on September 19.
- * *Merganser americanus*.— Common during fall and winter.
- Merganser serrator*.— A single specimen taken.
- * *Lophodytes cucullatus*.— The most abundant of the Mergansers, frequenting especially the rivers, and in the autumn collecting in flocks of forty and fifty individuals.
- Anas boschas*.— The most common Duck in this vicinity, a few remaining throughout the winter.
- Anas americana*.— During the latter part of September this is one of the most common Ducks in the marshes at the southern end of the lake.
- Anas carolinensis*.— Quite common, especially during the migrations.
- Anas cyanoptera*.— Rare. A female with several young two or three days old seen June 11.
- Spatula clypeata*.— Common. Said to have been unusually abundant in the autumn of 1894. About twenty-five were seen about the fort on June 1; they were mostly paired and had perhaps been driven out of the St. Joseph marshes, where they breed, by the unusually high water.
- * *Dafila acuța*.— Common in migrations.
- * *Aix sponsa*.— Common summer visitor, especially abundant at the southern end of the lake during the early autumn.
- * *Aythya collaris*.— Seems to be more common than the other 'Blue-bills,' one or both of which occur, but were not certainly identified.
- * *Clangula islandica*.— Abundant throughout the winter. All the Golden-eyes seen by me were of this species, although the other doubtless occurs.
- * *Charitonetta albeola*.— Common during winter.
- * *Histrionicus histrionicus*.— Rare, but occasionally taken on the St. Joseph and Coeur d'Alène Rivers.
- * *Erismatura jamaicensis*.— Not uncommon in spring and autumn.
- Branta canadensis*.— Common in spring, rare in autumn. The most abundant species of Goose, especially on the prairie and at the southern end of the lake. I have seen them as early as February 22, although the middle of March is the more usual time of their arrival. A few pairs nest near the lake, but much less frequently than a few years ago, owing to the increase of settlers. Very few Geese are seen during the fall flight

as at this season they, as well as many Ducks, pass south over the open prairie country about fifty miles west of the lake.

Hunters have told me that the White-fronted and Snow Geese are sometimes shot, but that they are decidedly rare.

Olor sp.?—In the spring Swans are sometimes quite common on the marshes bordering the rivers at the southern end of the lake and in the lake itself. I was unable to examine any specimens for identification.

* *Botaurus lentiginosus*.—Rather common in suitable localities about the lake.

Grus mexicana.—Not uncommon during the migrations, and a few pairs probably breed near the southern end of the lake.

Porzana carolina.—Not rare in the marshes; breeds.

Fulica americana.—Common, especially in autumn.

Phalaropus lobatus.—Occurs during the latter part of August and early in September on the lake, sometimes in great numbers, but passes through rapidly.

Recurvirostra americana.—A pair seen and one taken early in September.

Gallinago delicata.—Usually rather uncommon, but occurring in considerable numbers during the autumn of 1896. They appeared during the last week in August and were abundant until the middle of September, affording fine sport. A second flight of somewhat larger and darker birds appeared on October 22 and remained about two weeks, the last one being seen on November 5. I am inclined to think that the first flight was of birds breeding in the general vicinity, the second, of birds from more northern localities.

* *Macrorhamphus griseus*.—Five specimens, taken September 12 on the St. Joseph marshes, were decidedly of the eastern form.

Tringa maculata.—Common in 1896 from the last of August until early in October. Abundant on September 12, when about 125 were shot. Many were in flocks of considerable size, not a common habit with this species.

* *Tringa minutilla*.—Three taken August 15.

Ereunetes occidentalis.—One taken in company with the preceding.

Totanus melanoleucus.—A rather common fall migrant. One heard on June 20.

Totanus solitarius.—A young bird taken August 26.

* *Bartramia longicauda*.—Breeds not uncommonly on the prairie north of the fort. They begin to leave for the South about the twentieth of July.

Actitis macularia.—Common summer visitor. Several nests were found near the fort.

Numenius longirostris.—Not uncommon on the prairie, arriving during the latter part of March.

* *Squatarola squatarola*.—Four taken September 12 on the St. Joseph marshes.

* *Charadrius dominicus*.—Usually rare. A large flight passed through northern Idaho and eastern Washington from the 15th to 20th of September, 1896. This was so uncommon that the local papers had notices of their presence, with highly original accounts of the birds' usual haunts and habits.

Ægialitis vocifera.—A few pairs breed on the prairie near the Spokane River.

Dendragapus obscurus richardsonii.—Occasionally found about the fort, but more common a few miles away, where they are not hunted so much. Breeds from lake level to the tops of the surrounding mountains. On July 1, near the base of Mica Peak, a brood of nearly grown young was seen; the next day, just below the summit, a female with a brood of chicks was found; the latter at once scattered in the grass and the parent, to obtain a better view of what was going on, flew up and alighted on the pack of one of the mules.

Dendragapus franklinii.—In the autumn of 1894 about forty specimens of this beautiful Grouse were brought in for sale by a ranchman, who said that he killed them on Canfield's Butte, a high hill a short distance northeast of the fort. While hunting near the southern end of Lake Pend d'Oreille the settlers told me that the 'fool hen' was rather common in the surrounding woods, but I did not happen to see any.

Bonasa umbellus togata.—Exceedingly abundant, much more so than I have ever found any form of the Ruffed Grouse. Many are killed by ranchmen and others over dogs trained to tree the birds, and the local market is plentifully supplied. One man told me that he no longer cared for them on his own table, but that he still fed his dogs on them!

Pediocætes phasianellus columbianus.—Quite common in all suitable localities, particularly about ranches on the extensive prairie north of the fort. In the winter it penetrates into the pine woods for considerable distances, passing the nights and the greater portion of stormy days in the trees.

Zenaidura macroura.—Not common, but generally distributed in the vicinity.

Cathartes aura.—A few are seen at intervals during the summer, arriving about the middle of April and leaving in September.

Circus hudsonius.—Not uncommon in autumn.

Accipiter velox.—One taken May 15.

Accipiter atricapillus.—Rather common during the migrations and winter, and probably breeds, as I have taken a specimen as late as May 30. Especially abundant during the early part of the winter of 1896-97, many being killed, while attacking chickens, by ranchmen and others. It may be remarked that Snowy Owls were unusually common about the same time, and that a specimen of *Falco rusticolus* was shot at Spokane, Wash., about twenty-five miles distant.

Buteo swainsoni.—A young bird taken September 14.

* *Archibuteo lagopus sancti-johannis*.—Occasionally seen in early spring and late autumn.

Aquila chrysaëtos.—Occurs sparingly throughout the year.

Haliaeetus leucocephalus.—A few pairs breed about the lake. An adult seen on February 5.

Falco mexicanus.—Rare; taken in September.

* *Falco richardsonii*.—Of a male taken August 20 Mr. Brewster remarks: "This specimen is unusually dark and richly colored," but the wing markings were typical of the species. A young female was taken October 1.

Falco sparverius deserticolus.—The Sparrow Hawk arrives early in April and is common by the 15th–20th; breeds. With the exception of this species and the Goshawk and Osprey, Hawks are remarkably scarce about Fort Sherman, although apparently there is an abundant supply of food at all seasons.

Pandion haliaëtus carolinensis.—First observed April 25 and frequently seen thereafter during the summer.

Asio wilsonianus.—A single specimen examined.

Asio accipitrinus.—This Owl is frequently flushed on the prairie and marshes in the autumn.

* *Nyctala tengmalmi richardsoni*.—Two fine specimens are in Mr. Shallis's local collection which were taken early in the spring of 1894 on the prairie about seven miles from the fort. These, and a third specimen brought to him some years ago, are the only ones Mr. Shallis has seen.

* *Nyctala acadica*.—A specimen taken January 19; its stomach contained two *Hesperomys*. During the spring its notes are frequently heard at night in the deep woods bordering the lake.

Megascops asio subsp.?—Screech Owls were occasionally heard in and about the fort, doubtless the *macfarlanei* form. They were quite rare, apparently.

Bubo virginianus subarcticus.

Bubo virginianus saturatus.—Both forms of the Great-horned Owl occur here commonly, and, judging from the specimens I have examined, in about equal numbers.

Nyctea nyctea.—Not uncommon in some winters, but irregular and uncertain. In December, 1896, there was a general migration of Snowy Owls into northern Idaho, Oregon and Washington and dozens were killed.

* *Glaucidium gnoma*.—Not uncommon and a resident.

* *Coccyzus americanus occidentalis*.—One seen July 30, 1895.

Ceryle alcyon.—Common during summer. A few pass the winter but most return from the South about the middle of April.

Dryobates villosus hyloscopus.—Abundant during winter, and more often seen at that season than all other Woodpeckers combined. Females were more common than males in the proportion of at least four or five to one. A series of specimens are of greater size than the usual average of

this bird. Cabanis's Woodpecker is here very unsuspecting, in marked contrast to its behavior in some other regions. After the first of March they are much less common and they breed but sparingly near the fort. Two nests found June 15 contained young, a late date.

Dryobates pubescens homorus.—Rather uncommon resident, breeding sparingly. Specimens taken here differ from all of the recognized forms in some respects.

Xenopicus albolarvatus.—A rare resident.

Picoides arcticus.—A fairly common resident, especially on the higher parts of the hills, where in winter I have seen many nesting excavations undoubtedly made by this bird, which shows a marked partiality for locating them near the base of slender pine stubs. Mr. Brewster informs me that the bills of specimens taken at Fort Sherman are longer and slenderer than in eastern examples, but less so than in the series I took at Fort Klamath, Oregon.

* *Sphyrapicus varius nuchalis*.—A few pairs breed among the cottonwoods bordering the lake near its outlet and along the river.

Ceophlœus pileatus.—A rather common resident, more plentiful in the deep woods.

Melanerpes torquatus.—Arriving early in May, Lewis's Woodpecker soon becomes common and is generally distributed, breeding in cottonwoods as well as in pines.

Colaptes cafer.—Common summer visitor arriving late in March, though a few remain throughout the winter. Breeds from lake level up to the summit of Mica Peak. Dr. Allen, in the map accompanying his paper on the Flickers,¹ places northern Idaho in the habitat of *C. auratus cafer*, or *hybridus*, as it was formerly called; but all the specimens taken at Fort Sherman, both breeding and migrating birds, were pure *cafer*.

* *Chordeiles virginianus*.—Arriving about the first of June, few are seen until the 12th or 15th, when they suddenly become common, and so remain until early in August, when more arrive from the north. They are abundant until the end of the month, when most leave, a few stragglers being seen until the middle of September.

In regard to some skins collected here Mr. Brewster writes: "This series, as a whole, seems to me to be referable to *virginianus*, although two or three of the females have too much gray on the back and wings to be typical. The male, on the other hand, is a typical *virginianus*."

* *Chætura vauxii*.—This Swift arrives early in May and may be seen almost daily during the month, generally singly. About July 20 they again appear and pass rapidly to the south, though I have seen one as late as August 31. While none were observed during the breeding

¹'The North American Species of the Genus *Colaptes*,' etc. Bull. Am. Mus. Nat. Hist., IV, map facing p. 24.

season I have little doubt that some remain, as late in May I have watched them apparently breaking off dead twigs near the tops of high cottonwoods, though this may have been in play. This, and the western Montana record in Bendire's 'Life Histories' (Vol. II. p. 183), considerably extend to the eastward the known range of this species. I have frequently seen Swifts along the Yellowstone River in Montana but have been unable to secure any for identification.

* *Trochilus alexandri*. — Fairly common late in May, especially about the low, lavender-colored blossoms of the camass. A few pairs remain to breed.

* *Selasphorus rufus*. — A common spring migrant, probably breeding. Found most frequently about blossoms of cherry trees in the yards about the officers' quarters. I have rarely seen this Hummer outside the fort, or the other two within it.

* *Stellula calliope*. — The most common of the Hummers at Fort Sherman, both during the spring migration and the nesting season, their arrival in both years coinciding with the first blossoming of the wild hawthorn.

A good many Hummers, probably of the three species, pass through to the south during the latter part of August.

Tyrannus tyrannus. — Arriving during the last week in May, the King-bird at once becomes fairly common among the cottonwoods bordering the river, and in which it nests.

Tyrannus verticalis. — Rare; but a pair or two breed each year near the fort.

Contopus borealis. — Breeds sparingly at a height of several hundred feet above lake level.

Contopus richardsonii. — Very common, both in pine woods and in cottonwoods bordering the river.

* *Empidonax hammondi*. — Northern Idaho must be near the center of abundance of this Flycatcher, and it is far more plentiful here than I have found it to be in Montana and Oregon. Arriving early in May, its habits here are somewhat peculiar, for it is as common among young cottonwoods and willows along the river and in and near swamps — just such places as *E. traillii* haunts — as in dry woods among pines, in which it is generally seen in the higher branches. It breeds in the latter situations, and I also took a good series of nests in young cottonwoods and aspens, some not more than two or three feet above the ground or water. When in pines the nest is usually thirty or forty feet from the ground, saddled on a horizontal dead branch several feet from the trunk, and is much like a *Contopus* nest. When placed in a young cottonwood the nest is more like that of *E. wrightii*, near the ground and generally against the trunk. I found Hammond's Flycatcher to be by no means as shy as other observers have noted; in fact, it is here one of the most common and, for an *Empidonax*, conspicuous of the summer

visitors, its notes being heard almost everywhere. Of a number of sets of eggs collected at Fort Sherman none were entirely unspotted but a majority were marked at the larger end, more or less distinctly, with delicate light brown dots.

Empidonax wrightii. — Only a single specimen taken; this was on May 17.

* *Otocoris alpestris leucolæma*. — A typical female taken September 28, on the prairie. This was one of a number of Horned Larks collected on the same day and at the same place, all the others being of the next form.

* *Otocoris alpestris merrilli*. — Careful search failed to reveal the presence of either form of Horned Lark during the winter, though it is probable that *leucolæma* occasionally occurs about ranch yards at that season. The present one returns in March, and during spring and summer is very common on the prairie, but none were seen at any time about the post gardens and adjoining fields, apparently equally suited to their habits. When grouse shooting in August these Larks were often flushed in corn and potato fields on the prairie where they sought shelter from the intense heat of the sun. Later they are found in the open prairie, stubble or ploughed land, collecting in flocks of twenty, forty or more.

Referring to a series of skins collected here, Mr. Brewster writes: "Specimens from Fort Sherman appear to be referable to *O. a. merrilli* although they are not typical, having the dorsal streaking much less pronounced than in Klamath birds. The autumnal examples are also more olivaceous above than the latter."

Pica pica hudsonica. — Not uncommon in winter, a few individuals making daily visits to the back yards of the quarters and to the garbage pile a few hundred yards outside the fort. There was a decided increase in their numbers about the middle of February, but they were rarely seen after March, and none appear to breed near the fort.

Cyanocitta stelleri annectens. — Fairly common about the fort in spring and autumn, a few passing the winter. It does not appear to breed at lake level but several pairs were seen early in July on Mica Peak, first at an elevation of about 1500 feet above the lake and thence upward to the summit. These Jays are typical *annectens*.

Perisoreus canadensis capitalis. — Rather common resident. A pair was seen collecting building material for a nest in a young pine on April 17, near Hoodoo Lake, about forty miles from the fort, but I was unable to return to secure it.

Mr. Brewster informs me that some skins sent him were much darker than Colorado specimens and had the dark occipital band broader.

Corvus corax sinuatus. — Probably resident; seen occasionally during the winter.

Corvus americanus. — Common during the migrations, a few pairs breeding near the edge of the prairie.

Nucifraga columbiana.—Probably owing to the identity of their principal winter food this species and the Crossbill were coincidentally abundant during the winter of 1894-95, very rare during that of 1895-96, and again common during so much of the winter of 1896-97 as I was at the fort, these periods being marked by the abundance or failure of the crop of cones of a common pine, upon the seeds of which both species chiefly fed. At other seasons Clark's Nutcracker appeared irregularly, probably wandering down from the surrounding hills, as, early in July, I saw several families on the higher parts of Mica Peak. For the first time in my experience in the Northwest I found this usually shy and suspicious bird to be quite tame in winter, visiting the yards of the houses for such scraps as were to be found; and they were especially fond of pecking at bones left on the surface of the snow by dogs. Several were caught by cats and one by a soldier in his hands.

(*To be concluded.*)

BIRDS OBSERVED ON A COLLECTING TRIP TO BERMUDEZ, VENEZUELA.

BY WILLIAM HENRY PHELPS.

*With Critical Notes and Descriptions of Two New Species, by Frank
M. Chapman.*

IN THE year 1877 Dr. Adolfo Ernst¹ of Caracas divided Venezuela into four avifaunal districts: Eastern, Central, Cordilleran, and Lowland. The first comprises the group of mountains lying in the northeastern corner of the country, and is separated from the central district by the low country about Barcelona. The central district comprises the mountainous region along the northern coast, as far west as Barquisimeto. The high mountains to the west of this point are cordilleran and have affinities with the fauna of Colombia. The lowland region comprises all of that rolling country of plains and forests lying between this mountainous region of the north and the Orinoco River. The birds south of the river are Brazilian in their affinities and are

¹ Estudios sobre la Flora y Fauna de Venezuela. Caracas. 1877, p. 287.